33.9 87

=DB.34·0°, WB.32·3°, DP.29·3°, Fusion, 16 inch, RH.82%.

METEOROLOGY.

Abstract of Observations made in the City of Dublin, Lat. 53° 20′ N., Long. 6° 15′ W., for the Month of January, 1886.

Mean Height of Barometer,	29·661 inches.
Maximal Height of Barometer (on 11th, at 9 p.m.)	30·287 ,,
Minimal Height of Barometer (on 17th, at 9 p.m.),	29·032 ,,
Mean Dry-bulb Temperature,	37·6°.
Mean Wet-bulb Temperature,	36·1°.
Mean Dew-point Temperature,	33·9°.
Mean Elastic Force (Tension) of Aqueous Vapour,	·196 inch.
Mean Humidity,	86·9 per cent.
Highest Temperature in Shade (on 3rd),	53·4°.
Lowest Temperature in Shade (on 7th),	24·9°.
Lowest Temperature on Grass (Radiation) (on 7th),	20·0°.
Mean Amount of Cloud,	65·7 per cent.
Rainfall (on 26 days),	3·244 inch.
Greatest Daily Rainfall (on 25th),	·901 inch.
General Directions of Wind,	W., S.W., N.W.

Remarks.

Although the New Year opened with very mild, dull weather, January, 1886, will be remembered as a cold, snowy month. It is true that no severe frosts were recorded near Dublin, but in many parts of the United Kingdom extremely low temperatures were noted from time to time—the lowest of all being 7° Fahr. at Newton Reigny, near Penrith, in Cumberland, on the 19th. Some idea of the severity of the weather may be gathered from the fact that in Dublin snow or sleet fell on eighteen days, and hail on fourteen days. Both the rainfall and rainy days were much above the average, while atmospherical pressure and temperature were as much below it. The maximal temperature did not exceed 40° from the 17th to the 27th inclusive.

The mean height of the barometer was 29·661 inches, or 0·220 inch below the average value for January—namely, 29·881 inches. The mercury rose to 30·287 inches at 9 p.m. of the 11th, and sank to 29·032 inches at 9 p.m. of the 17th. The observed range of atmospherical pressure was, therefore, 1·255 inches—slightly more than an inch and a quarter. The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 37·6°, or 4·3° below the value for December, 1885; that calculated by Kaemtz's formula—viz., $min. + (max. - min. \times \cdot 41) = Mean\ Temp.$—from the means of the daily maxima and minima was 37·1°, or 3·7° below the average mean temperature for January, calculated in the same way, in the twenty years, 1865–84, inclusive (40·8°). The arithmetical mean of the maximal and minimal readings was 37·9°, compared with a twenty years' average of 41·4°. On the 3rd the thermometer in the screen rose to 53·4°—wind S.W.; on the 7th the temperature fell to 24·9°—wind W. The minimum on the grass was 20·0° on the same date. The diurnal range of temperature was considerable on the 3rd, and from the 10th to the 15th inclusive, but the maxima in this period were sometimes reached at night. The rainfall was 3·244 inches, distributed over 26 days. The average rainfall for January in the twenty years, 1865–84, inclusive, was 2·243 inches, and the average number of rainy days was 17·1. The rainfall, therefore, and the rainy days were both decidedly above the average.

Sleet or snow fell on the 5th and four following days, the 13th, the 15th and six following days, the 23rd, 24th, 25th, 30th and 31st—in all on eighteen days. Hail was noted on the 6th, 8th, 13th, 16th and four following days, the 22nd and three following days, the 30th and 31st—in all on fourteen days. Ice-crystals were seen on the evening of the 19th. The air was more or less foggy on the 7th, 10th, 22nd, 25th, 26th, 27th, and 28th. Lunar halos were observed on the nights of the 20th and 22nd, and a solar halo appeared on the 28th. High winds prevailed on thirteen days.

At the beginning of the year temperature was generally high for the season.

In the course of the week ending Saturday, the 9th, the dominant systems of atmospherical pressure over the United Kingdom were alternately cyclonic and anti-cyclonic, the wind-type varying from south-westerly to north-westerly or northerly. The weather was very changeable—at times mild and again very cold and foggy. On the 6th a heavy snowstorm prevailed in the valley of the Thames.

During the second week the weather was most changeable. The distribution of pressure was cyclonic—deep depressions appearing in the far north, while elongated subsidiary disturbances travelled in an easterly direction across our Islands. Southerly winds, rain and comparatively mild weather alternated with north-westerly and northerly winds, snow, sleet, hail and frost—the changes from one type to the other being sudden and frequent.

In the third week (ending the 23rd), pressure distribution was again mainly cyclonic, but the type was complex and variable. On Monday, the 18th, the barometer was very low over the North Sea and so continued for some days. Shallow depressions then began to advance *westwards* from Germany to the S.E. of England—cold weather was thus continued, with frequent falls of snow or sleet in many places, and occasionally clearer skies and frost.

The weather remained very unsettled and changeable in the fourth and last week. On the 24th and following days a depression lay over the Bay of Biscay, Brittany, the English and St. George's Channels. Heavy snow fell in and about Dublin on Sunday and Monday, the 24th and 25th, as well as in the S.W. of England. At 9 a.m. of the 25th the temperature in Dublin was 27·1°, and the appearance was quite Arctic. A thaw followed in the afternoon and a heavy fall of rain took place at night. The low pressure system in the S. gradually filled up, but on the 28th the barometer fell to the W. and N.W., and a new series of depressions began to come in from the Atlantic, causing showery, broken weather to the end of the month.

It is noteworthy that the cold weather appeared to be of Atlantic or North-American origin—it certainly came in from the westward, at a time when no extreme cold prevailed in the N. or N.W. of Europe; and it also showed itself near the centre of an extensive and very deep atmospherical depression.

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EXTRA REMARKS.

METEOROLOGY.

Abstract of Observations made in the City of Dublin, Lat. 53° 20′ N., Long. 6° 15′ W., for the Month of February, 1886.

Mean Height of Barometer,	30·096 inches.
Maximal Height of Barometer (on 8th, at 9 p.m.)	30·577 ,,
Minimal Height of Barometer (on 1st, at 9 a.m.),	29·319 ,,
Mean Dry-bulb Temperature,	39·1°.
Mean Wet-bulb Temperature,	37·4°.
Mean Dew-point Temperature,	34·9°.
Mean Elastic Force (Tension) of Aqueous Vapour,	·205 inch.
Mean Humidity,	85·7 per cent.
Highest Temperature in Shade (on 8th),	53·4°.
Lowest Temperature in Shade (on 5th),	27·3°.
Lowest Temperature on Grass (Radiation) (on 5th),	23·2°.
Mean Amount of Cloud,	72·5 per cent.
Rainfall (on 15 days),	1·981 inches.
Greatest Daily Rainfall (on 28th),	·552 inch.
General Directions of Wind,	S.E., S.W., E.

Remarks.

Like January, this was a cold month; but unlike January, the cold was connected with high pressure systems, and was accompanied by calms, or easterly to southerly winds. In the twenty years, 1865–84 inclusive, only once was February colder than in the present year—namely, in 1873, when the mean temperature was 37·9° compared with 39·7°—or, by Kaemtz's formula, 37·1° compared with 38·9°. The distribution of the cold in the British Islands was that usually observed in winter Continental anticyclones—the weather was most severe in the midland counties, S. and S.E. of England; less severe in Scotland, and least severe in Ireland. This was specially so from the 7th to the 12th inclusive, when fine, mild weather was experienced in Ireland and Scotland, while hard frost and dense fogs prevailed in and about London, and in the S. and E. of England generally.

The mean height of the barometer was 30·096 inches, or 0·234 inch above the average value for February—namely, 29·862 inches. The mercury rose to 30·577 inches at 9 p.m. of the 8th, having been as low as 29·319 inches at 9 a.m. of the 1st. The observed range of atmospherical pressure was, therefore, 1·258 inches—slightly more than an inch and a quarter. The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 39·1°, or 1·5° above the value for January, 1886; that calculated by Kaemtz's formula—viz., $min. + (max. - min. \times \cdot 41) = Mean\ Temp.$—from the means of the daily maxima and minima was 38·9°, or 4·0° below the average mean temperature for February, calculated in the same way, in the twenty years, 1865–84, inclusive (42·9°). The arithmetical mean of the maximal and minimal readings was 39·7°, compared with a twenty years' average of 43·2°. On the 8th the thermometer in the screen rose to 53·4°—wind W.S.W.; on the 5th the temperature fell to 27·3°—wind calm. The minimum on the grass was 23·2° on the same date. The diurnal range of temperature was small on many occasions. The rainfall was 1·981 inches, distributed over 15 days. The average rainfall for February in the twenty years, 1865–84, inclusive, was 2·244 inches, and the average number of rainy days was 17·6. The rainfall, therefore, and the rainy days were both decidedly below the average.

Sleet or snow fell on the 14th, 27th, and 28th. Hail was noted on the 1st, 25th, 27th, and 28th. The air was more or less foggy on the 4th and four following days, the 10th and two following days, the 15th, 19th, and three following days, and the 26th. Lunar halos were observed on the nights of the 11th and 12th, and a solar halo appeared on the 12th, 13th, and 15th. High winds prevailed on five days.

At the beginning of the month, atmospherical pressure was low, under the influence of an extensive depression, the centre of which (28·60 inches) lay over the extreme south of Norway. Fresh W. to N.W. winds were blowing, with cold, showery weather. A rapid rise of the barometer took place in the rear of this depression, and on the 4th an anticyclone appeared over Ireland, subsequently moving southwards to France. This was succeeded by the development of two shallow depressions—one of which travelled in a northerly direction, while the other followed in the wake of the high pressure system to France.

The weather in the week ending Saturday, the 13th, was changeable and showery on the extreme western coasts, mild in the east of Ireland and in most parts of Scotland, but chiefly dry, cold, and foggy in the greater part of England. From the 7th to the 10th an anticyclone extended from Germany across the south of England, causing light variable winds, calms and very cold, foggy weather in that region; while conditions were cyclonic in Ireland and Scotland, where the weather was open and changeable. On the night of the 9th temperature fell to 19° at Cambridge, 22° in London, and 23° at Hurst Castle and Oxford.

After Sunday, the 14th, a large anticyclone—in which readings at one time exceeded 30·90 inches—was formed over Russia and Northern Europe, from which a well-marked "ridge" extended south-westwards across the North Sea and the United Kingdom. Easterly winds consequently set in over the southern parts of our area, while variable airs prevailed in the north. The weather became gloomy, cold, and foggy over England, but was at times fine and bright in Ireland and Scotland. Showers of sleet fell on the N.E. coast of England, but elsewhere the weather was, as a rule, dry.

During the last week similar conditions held, so that easterly (N.E. to S.E.) winds were very prevalent, with a continuance of cold weather, much cloud and fog. Snow or sleet fell daily in the east of Scotland, north-east of England, and at the close of the period in Ireland also. On the 21st and 22nd large quantities of rain fell in Munster, in connection with shallow depressions which developed themselves within the limits of the anticyclone. On Sunday, the 28th, a cyclone approached St. George's Channel from S.W., the S.E. wind freshened to a gale at night, and a heavy snowstorm occurred in the east of Ireland, over the Irish Sea, and in Wales, subsequently extending over almost the entire kingdom.

35·6 80

EXTRA REMARKS.

Meteorology.

Abstract of Observations made in the City of Dublin, Lat. 53° 20′ N., Long. 6° 15′ W., for the Month of March, 1886.

Mean Height of Barometer,	29·880 inches.
Maximal Height of Barometer (on 11th, at 9 a.m.)	30·463 ,,
Minimal Height of Barometer (on 31st, at 7 a.m.),	29·200 ,,
Mean Dry-bulb Temperature,	41·2°.
Mean Wet-bulb Temperature,	38·7°.
Mean Dew-point Temperature,	35·2°.
Mean Elastic Force (Tension) of Aqueous Vapour,	·216 inch.
Mean Humidity,	79·3 per cent.
Highest Temperature in Shade (on 21st),	60·4°.
Lowest Temperature in Shade (on 4th),	23·0°.
Lowest Temperature on Grass (Radiation) (on 4th),	17·3°.
Mean Amount of Cloud,	61·7 per cent.
Rainfall (on 19 days),	2·065 inches.
Greatest Daily Rainfall (on 26th),	·462 inch.
General Directions of Wind,	S.E., E., S.W.

Remarks.

The bitterly cold weather, which had prevailed during the greater part of January and February, held until the 18th of March, when a magical change occurred throughout the British Islands. From the day named until the 29th the mean temperature was as much above, as it had previously been below, the average, and hence it happens that March, 1886, will not stand out prominently as a cold month in the record of many years. In Dublin the mean temperature of the month was lower than that recorded in 1886 (41·4°) on five occasions in the twenty years, 1865–84—viz., in 1865 (41·2°), 1867 (39·0°), 1869 (41·2°), 1876 (41·1°), 1883 (39·0°). At the same time, no such continuous and severe cold in March was noted in any of those twenty years as that which held until the 18th of the past month. The first week was, in fact, the coldest period of the winter of 1885–86—the mean temperature being only slightly above freezing point.

The mean height of the barometer was 29·880 inches, or 0·043 inch ~~above~~ below the average value for March—namely, 29·923 inches. The mercury rose to 30·463 inches at 9 a.m. of the 11th, and fell to 29·200 inches at 7 a.m. of the 31st. The observed range of atmospherical pressure was, therefore, 1·263 inches—slightly more than an inch and a quarter. The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 41·2°, or 2·1° above the value for February, 1886; that calculated by Kaemtz's formula—viz., *min.* + (*max.* — *min.* × ·41) = *Mean Temp.*—from the means of the daily maxima and minima was 40·5°, or 2·2° below the average mean temperature for March, calculated in the same way, in the twenty years, 1865–84, inclusive (42·7°). The arithmetical mean of the maximal and minimal readings was 41·4°, compared with a twenty years' average of 43·5°. On the 21st the thermometer in the screen rose to 60·4°—wind S.W.; on the 4th the temperature fell to 23·0°—wind calm. The minimum on the grass was 17·3° on the same date. The diurnal range of temperature was small on many occasions during the cold period. The rainfall was 2·065 inches, distributed over 19 days. The average rainfall for March in the twenty years, 1865–84, inclusive, was 2·081 inches, and the average number of rainy days was 16·5. The rainfall, therefore, was slightly below, while the rainy days were decidedly above the average.

Sleet or snow fell on the 1st, 2nd, 3rd, 14th, 16th,, 17th, 18th, 29th, and 31st. Hail was noted on the 2nd, 3rd, 14th. 15th, 16th, 17th, 29th, and 31st. The air was more or less foggy on the 4th, 13th, 18th, and 22nd. Lunar halos were observed on the night of the 19th, and solar halos appeared on the 7th and 10th. High winds prevailed on as many as fourteen days. A bright aurora borealis was seen on the evening of the 30th, and a fainter display occurred on the 31st.

The month opened with a snowstorm of exceptional *severity*, connected with a deep depression, which appeared over St. George's Channel on the 1st, and moved towards E.N.E., until its centre reached the mouth of the Humber on the 2nd. Snow lay five inches deep in the streets of Dublin, but in the N. and N.E. of England vast drifts completely blocked the traffic by rail and road. During the first week the weather remained in a most winter-like condition—the prevailing winds being easterly to northerly, the temperature low, and the air dry. Falls of snow and sleet were of frequent occurrence. On the 4th the frost in Dublin was more intense than it had been at any time during the winter, and the mean temperature of the week was only 33·1°.

In the week ending Saturday, the 13th, there was a continuance of cold weather, particularly over Great Britain and the North Sea, where keen, dry easterly winds prevailed. On the 7th an intense frost occurred in the N.W. of England in the rear of a depression, which had passed south-eastwards across France during the previous day. At Tean (Stoke-upon-Trent) the sheltered thermometer fell to 7°, at Worksop to 8°, and at Newton Reigny to 10°. At Worksop an instrument exposed on the the snow descended to 5°. In Ireland, about this time, *strong S.E. winds* and gales prevailed. On Tuesday, the 9th, the wind was very searching and the atmosphere was unusually dry in Dublin—the relative humidity at 9 p.m. being only 50 per cent.

In the course of the week ending Saturday, the 20th, one of the most sudden and complete changes of weather experienced for many years took place throughout the United Kingdom. The period commenced with a continuation of the frosty, gloomy conditions which had held for so long. In and near Dublin hail, sleet and snow fell daily up to and including Wednesday, the 17th, and in Great Britain the nights were severely cold. During the forenoon of Wednesday, however, the barometer fell in the west, and later in the day a large depression advanced rapidly towards Ireland. Its centre moved north-eastwards outside our western coasts, so that the wind drew into S. and S.W. all over the Kingdom, and warm showery weather spread quickly across the country. Thus, whereas at Oxford the thermometer had been as low as 21° early on the 18th, it had risen to 55°—a range of 34°—by the afternoon of the 19th, when also a maximum of 62° was attained in London—the highest reading there recorded since September 29, 1885.

Throughout the fourth week (the 21st to the 27th inclusive) the weather was changeable, mild and damp, with southerly (S.E. to S.W.) winds, which, though moderate generally, freshened at times, especially in the West of Ireland, where they reached the force of a gale. During this period the barometer was low over the Atlantic, high on the Continent, the distribution of pressure being mainly cyclonic in the west. Temperature was considerably above the average—the mean for the week in Dublin ~~being~~ was 52·5°, and maximal readings, varying from 60° to 65° were recorded in many places. A heavy fall of rain occurred in Ireland on the 26th.

During the last three days several depressions passed across this country. The weather was very broken, with unsteady temperature, severe gales from S.W. to N.W., showers of cold rain, sleet and hail, in places thunder and lightning, and brilliant aurora at night. The auroral display of the 30th was seen from Dublin as a broad band of moonlike light projected across the northern sky from W. to E. On the evening of the 31st white streamers rose from the north from time to time.

EXTRA REMARKS.

METEOROLOGY.

Abstract of Observations made in the City of Dublin, Lat. 53° 20′ N., Long. 6° 15′ W., for the Month of April, 1886.

Mean Height of Barometer,	29·909 inches.
Maximal Height of Barometer (on 15th, at 9 a.m.)	30·404 ,,
Minimal Height of Barometer (on 8th, at 9 a.m.),	29·022 ,,
Mean Dry-bulb Temperature,	45·5°.
Mean Wet-bulb Temperature,	42·6°.
Mean Dew-point Temperature,	39·3°.
Mean Elastic Force (Tension) of Aqueous Vapour,	·244 inch.
Mean Humidity,	79·7 per cent.
Highest Temperature in Shade (on 27th),	64·8°.
Lowest Temperature in Shade (on 11th),	31·8°.
Lowest Temperature on Grass (Radiation) (on 11th),	26·9°.
Mean Amount of Cloud,	54·0 per cent.
Rainfall (on 15 days),	1·524 inches.
Greatest Daily Rainfall (on 4th),	·374 inch.
General Directions of Wind,	N.E., E., W.

Remarks.

Opening with unsettled, stormy, and showery weather, this month proved finally to be both dry and cold—only a little more than half of inch of rain (·550 inch) falling after the 9th on but six days, and polar (E. to N. W.) winds blowing almost constantly during the same period. Previously, strong S. to W. winds had prevailed, with higher but unstable temperature and frequent showers—these conditions being brought about by the passage northeastwards along our Atlantic coasts of a series of extensive and deep atmospherical depressions. In Dublin the mean temperature (46·3°) was lower than that recorded in the month of April except on three occasions in the twenty years, 1865–84—viz., in 1877 (46·1°), in 1879 (44·5°)—the lowest mean temperature yet observed in April—and in 1881 (45·6°). In 1875 the mean temperature was the same as that in 1886, and in 1884 it was one-tenth of a degree higher (46·4°).

The mean height of the barometer was 29·909 inches, or 0·052 inch above the average value for April—namely, 29·857 inches. The mercury rose to 30·404 inches at 9 a.m. of the 15th, and fell to 29·022 inches at 9 a.m. of the 8th. The observed range of atmospherical pressure was, therefore, 1·382 inches—not much less than an inch and a half. The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 45·5°, or 4·3° above the value for March, 1886; that calculated by Kaemtz's formula—viz., *min.* + (*max.* − *min.* × ·41) = *Mean Temp.*—from the means of the daily maxima and minima was 45·1°, or 1·9° below the average mean temperature for April, calculated in the same way, in the twenty years, 1865–84, inclusive (47·0°). The arithmetical mean of the maximal and minimal readings was 46·3°, compared with a twenty years' average of 48·0°. On the 27th the thermometer in the screen rose to 64·8°—wind E.S.E.; on the 11th the temperature fell to 31·8°—wind N. The minimum on the grass was 26·9° on the same date. The diurnal range of temperature was large on some occasions—notably on the 1st, 7th, 12th, and 30th. The rainfall was 1·524 inches, distributed over 15 days. The average rainfall for April in the twenty years, 1865–84, inclusive, was 2·029 inches, and the average number of rainy days was 15·0. The rainfall, therefore, was decidedly below, while the rainy days were exactly equal to, the average.

Sleet fell on the 6th. Hail was noted on the 6th, 8th, 9th, 10th, 17th, and 29th. The air was more or less foggy on the 11th, 16th, 24th, 27th, and 30th. Solar halos were observed on the 12th and 17th. High winds prevailed on as many as nine days, of which six fell within the first week.

Until Saturday, the 10th, atmospherical pressure was lowest over the Atlantic between the British Islands and Iceland, as well as over the Norwegian Sea, and a number of depressions travelled from S.W. to N.E. along the shores of northwestern Europe. High winds, showers, and bright intervals prevailed at this time. The most important of these depressions came suddenly to the N.W. of Ireland during the night of the 6th–7th. Its rate of motion was immediately checked, so that its centre lay over Sutherland at 8 a.m. of the 8th, and had only reached the Shetlands twenty-four hours later. In this depression the barometer sank below 28·60 inches. Many subsidiary disturbances accompanied it, and the weather was consequently very unsettled and rough, with cold showers of hail and sleet in many parts of the United Kingdom, as the wind veered to W. and N.W.

In the course of the week ending Saturday the 17th, the weather was cold and rather unsettled. Northerly (N.W. to N.E.) winds of moderate strength prevailed over the British Islands during the entire period, but on the whole the weather was brighter and drier in Ireland than in Great Britain, especially towards the close, when the N.E. wind freshened with cold showers in the E. and S. of England.

The weather of the week ending the 24th was gemerally fair, with low temperatures until the end. On Friday, the 23rd, the sky became gloomy in Ireland with a freshening easterly wind, and att night a fall of rain occurred. Next day, a spell of warmth occurred in England, the thermometer rising to 68° at Cambridge, 69° at Loughborough and Oxford, and 70° in London.

Very important and decided changes occurred in the weather of the last week, the conditions being sometimes very springlike and at other times quite winterly. At first the weather was fine and bright, particularly on Easter Monday, the 26th; and temperature rose daily until Tuesday afternoon, when it reached 64·8° in Dublin,, 67° in London, 71° at Parsonstown and some English stations, and 72° at Leith. On this same day, a N.E. wind, low temperature (36°) and sleet and snow prevailed in the Shetland Isles. The barometer now rose in the north, so that the cold N.E. wind spread steadily southwards, displacing the warm aircurrent just referred to, and bringing with it cold rain and sleet to many places. In Dublin, a heavy fall of cold rain occurred on Wednesday afternoon, the 28th, and next day rain, sleet, and hail fell heavily in London, reducing the temperature to 36° in the shade. Night frosts now occurred in most parts of the country—the thermometer in the screen falling to 28° at Parsonstown and 33·2° in Dublin on the morning of the 30th.

EXTRA REMARKS.

METEOROLOGY.

Abstract of Observations made in the City of Dublin, Lat. 53° 20′ N., Long. 6° 15′ W., for the Month of May, 1886.

Mean Height of Barometer,	29·898 inches.
Maximal Height of Barometer (on 5th, at 9 a.m.)	30·377 ,,
Minimal Height of Barometer (on 17th, at 6 15 p.m.)	29·182 ,,
Mean Dry-bulb Temperature,	50·2°.
Mean Wet-bulb Temperature,	47·2°.
Mean Dew-point Temperature,	44·1°.
Mean Elastic Force (Tension) of Aqueous Vapour,	·292 inch.
Mean Humidity,	80·8 per cent.
Highest Temperature in Shade (on 5th),	67·4°.
Lowest Temperature in Shade (on 1st),	35·8°.
Lowest Temperature on Grass (Radiation) (on 1st),	26·9°.
Mean Amount of Cloud,	67·9 per cent.
Rainfall (on 21 days),	5·472 inches.
Greatest Daily Rainfall (on 12th),	1·266 inch.
General Directions of Wind,	N.E., E.

Remarks

Like May, 1885, this was a cold, unsettled, showery month, although not so cold as the month named, while the rainfall was more than double as large (5·472 inches, compared with 2·532 inches in 1885). Considering that May, on the average, is the driest month of the year in Dublin, the exceptional nature of the rainfall in 1886 is thrown into bold relief; and a further noteworthy feature is the fact that more than an inch of rain was measured on each of two consecutive days—1·151 inches on the 11th and 1·266 inches on the 12th. This was altogether a phenomenal downpour for May. The other leading characters of the month were cloudy skies, and north-easterly or easterly winds, often forming portion of the circulation round areas of low pressure, which did not come in over Western Europe from the Atlantic, but which either travelled northwards from the Mediterranean and the Iberian Peninsula, or else developed over France and the United Kingdom.

In Dublin the mean temperature (50·5°) was lower than that recorded in the month of May, except on five occasions in the twenty years, 1865–84—viz., in 1866 (50·1°), in 1869 (48·2°)—the lowest mean temperature yet observed in May—in 1872 (50·4°), in 1877 (49·7°), and in 1879 (48·8°). In 1885 the mean temperature was as low as 48·7°, and in 1876 it was identical with that recorded in the present year.

The mean height of the barometer was 29·898 inches, or 0·098 inch below the average value for May—namely, 29·996 inches. The mercury rose to 30·377 inches at 9 a.m. of the 5th, and fell to 29·182 inches at 6 15 p.m. of the 17th. The observed range of atmospherical pressure was, therefore, 1·195 inches—not much less than an inch and a quarter. The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 50·2°, or 4·7° above the value for April, 1886; that calculated by Kaemtz's formula—viz., *min.* + (*max.* — *min.* × ·41) = *Mean Temp.*—from the means of the daily maxima and minima was 49·3°, or 1·6° below the average mean temperature for April, calculated in the same way, in the twenty years, 1865–84, inclusive (50·9°). The arithmetical mean of the maximal and minimal readings was 50·5°, compared with a twenty years' average of 52·1°. On the 5th the thermometer in the screen rose to 67·4°—wind S.E.; on the 1st the temperature fell to 35·8°—wind E. The minimum on the grass was 26·9° on the latter date. The rainfall was 5·472 inches, distributed over 21 days. The average rainfall for May in the twenty years, 1865–84, inclusive, was 1·938 inches, and the average number of rainy days was 15·1. The rainfall, therefore, and the rainy days were very much in excess of the average. In 1869 the rainfall was also very large—5·414 inches on 19 days—and in 1878 4·540 inches fell on 23 days. On the other hand, in 1871, only ·378 inch was measured on 9 days.

Sleet fell on the 12th. Hail was noted on the 14th, 26th, and 28th. The air was more or less foggy on the 6th, 8th, and 9th. Solar halos were observed on the 1st, 6th, 7th, and 16th. High winds prevailed on as many as eight days, and there was an easterly gale on the 12th.

The month opened with unusually low temperature in many places, but in other respects fine weather. Early on the morning of the 1st the thermometer in the screen fell to 35·8° in Dublin, 30° at Loughborough, 29° in London, and 26° at Cambridge.

During the week ending Saturday, the 9th, there were some fine warm days, and indeed a gradual increase of temperature was in progress over Western Europe generally, owing to the slow movement in an easterly direction of an anticyclone, which prevailed over the United Kingdom at the beginning of the month. On the forenoon of the 4th a warm rain fell in Dublin, where vegetation made rapid progress. On this day, also, a remarkable variation in the hygrometrical state took place—the percentage relative humidity falling from 90 at 9 a.m. to 49 at 9 p.m.

The week ending on the 15th was marked by the advent of some of the most unsettled weather which had been experienced for a long while past. Into the space between two areas of high pressure—one off the north of Scotland, the other over the Mediterranean and southern Europe—some depressions advanced, while others were formed over the south of England and France. In consequence, N.E. and E. winds increased greatly in force in Ireland and England, with a remarkable fall of temperature and downpours of cold rain, with sleet and hail in many places. At the same time S.W. and W. winds prevailed in France, accompanied with severe thunderstorms. On the night of Wednesday, the 12th, a bourrasque, or tornado, passed across Spain, causing much havoc. In Dublin 1·151 inches of rain fell on the 11th, and 1·266 inches on the 12th; but at several stations the precipitation was much greater—thus, between the 11th and 13th, 4·83 inches were measured at Churchstoke (Montgomeryshire), 4·36 inches at Hereford, 4·15 inches at Pershore (Worcestershire), 3·38 inches at Ross (Herefordshire), and 3·44 inches at Fassaroe (Co. Wicklow). On the 13th the highest temperature in Dublin was 45·5°, and when the clouds rolled away on the following day the loftier mountains south of the city were seen covered with snow.

The weather of the third week (16th–22nd) remained in a very disturbed condition. Heavy rain fell in many places, and temperature was rather low for the time of year. On the morning of Monday, the 17th, a deep and complex depression appeared off the west of Ireland, travelling towards N.N.E. and causing strong southwesterly gales throughout the country. The 21st and 22nd were very fine, bright days in Dublin, but at 4 p.m. of the latter day a severe thunderstorm, accompanied with heavy rain and hail, passed over London.

From the 23rd to the 29th the weather was again changeable, showery, and at times squally. On Monday, the 24th, rain fell heavily in London throughout to the amount of 1·15 inches. This was a fine day in Dublin, but the 25th was cold, with frequent drenching showers. Hail fell on the 26th and 28th, and on the 29th the clouds changed quickly in form as though surcharged with electricity. The last two days were cool and fair in Dublin, with light or moderate easterly breezes; but on Sunday, the 30th, a thunderstorm occurred in the Co. Meath, as well as in the N.E. of Ireland.

EXTRA REMARKS.

Meteorology.

Abstract of Observations made in the City of Dublin, Lat. 53° 20′ N., Long. 6° 15′ W., for the Month of June, 1886.

Mean Height of Barometer,	30·016 inches.
Maximal Height of Barometer (on 30th, at 9 a.m.)	30·325 ,,
Minimal Height of Barometer (on 11th, 9 p.m.)	29·609 ,,
Mean Dry-bulb Temperature,	56·6°.
Mean Wet-bulb Temperature,	53·2°.
Mean Dew-point Temperature,	50·0°.
Mean Elastic Force (Tension) of Aqueous Vapour,	·363 inch.
Mean Humidity,	78·7 per cent.
Highest Temperature in Shade (on 28th),	71·7°.
Lowest Temperature in Shade (on 27th),	46·3°.
Lowest Temperature on Grass (Radiation) (on 6th),	39·5°.
Mean Amount of Cloud,	62·9 per cent.
Rainfall (on 15 days),	1·293 inches.
Greatest Daily Rainfall (on 2nd),	·540 inch.
General Directions of Wind,	N.W., W., E.

Remarks.

June, 1886, may be regarded as a month of average temperature, northwesterly winds, and a frequent but scanty rainfall. Cool, squally winds blew on several days from points between W. and N.N.W. At first these fresh winds were accompanied by showers, but after the 14th only ·148 inch of rain was registered on 4 days. About 42 per cent. of the rainfall for the whole month fell on the 2nd, when the measurement was ·540 inch. The amount of cloud was usually large, but the last few days were characterised by brilliant weather and intensely hot sunshine.

In Dublin the mean temperature (57·5°) was very nearly the average (57·7°); the mean dry bulb readings at 9 a.m. and 9 p.m. were, however, only 56·8°—the deficit being due to the low readings at 9 p.m.—55·8° on the average. In fact, the evenings were notably cold during the greater part of the month. In the twenty years ending with 1884, June was *coldest in 1882* (M. T. = 55·8°) and warmest in 1865 (M. T. = 61·0°). In 1885, the M. T. was 56·2°; in the cold year, 1879, it was 55·9°.

The mean height of the barometer was 30·016 inches, or 0·092 inch above the average value for June—namely, 29·924 inches. The mercury rose to 30·325 inches at 9 a.m. of the 30th, and fell to 29·609 inches at 9 p.m. of the 11th. The observed range of atmospherical pressure was, therefore, 0·716 inches—that is, less than three quarters of an inch. The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 56·8°, or 6·6° above the value for May, 1886; that calculated by Kaemtz's formula—viz., *min.* + (*max.* — *min.* × ·41) = *Mean Temp.*—from the means of the daily maxima and minima was 56·3°, or 0·3° below the average mean temperature for June, calculated in the same way, in the twenty years, 1865–84, inclusive (56·6°). The arithmetical mean of the maximal and minimal readings was 57·5°, compared with a twenty years' average of 57·7°. On the 28th the thermometer in the screen rose to 71·7°—wind E.; on the 27th the temperature fell to 46·3°—wind also E. The minimum on the grass was 39·5° on the 6th. The rainfall was 1·293 inches, distributed over 15 days. The average rainfall for June in the twenty years, 1865–84, inclusive, was 1·962 inches, and the average number of rainy days was 14·7. The rainfall, therefore, was considerably below the average, while the rainy days were equal to it. In 1878 the rainfall in June was very large—5·058 inches on 19 days—and in 1879, 4·046 inches fell on 24 days. On the other hand, in 1874, only ·405 inch was measured on 9 days.

The air was more or less foggy on the 4th and 11th. High winds prevailed on as many as six days, but there was no gale.

As happened in May, the month opened with unusually low temperature in many places, a keen N.E. wind, clouds and cold rain. Thunderstorms occurred in many parts of England. This unseasonable weather was caused by the passage across England and the North Sea of an irregularly shaped depression. In the rear of this low-pressure system an anticyclone spread over the British Isles from the northward. Light breezes and fine weather, therefore, set in and continued until the close of the week. On the night of Friday, the 4th, the sheltered thermometer at Cambridge fell to 34°.

During the week ending Saturday, the 12th, the weather experienced in our islands and their neighbourhood—though fair as a rule—was at times rainy and unsettled, and on one occasion (Thursday, the 10th) a fog formed over the S.E. of England, which was unusually dense for the time of year. At the same time heavy rain fell in the district named. Next day, local electrical showers fell near Dublin, although no thunder was heard in the city.

The weather of the following week—ending Saturday, the 19th—was cool and very unsettled, with frequent showers at first. Thunderstorms were reported from some English stations. Between the 14th and 16th the weather was affected by a large depression, which crossed Scotland on its way to Norway. From the latter country it travelled in a S.E. direction to Germany and Central Europe. It caused strong squally W. to N.W. or N. winds. While the weather over our islands was thus showery and cool, that over Northern Europe was remarkably fine and hot. Maximal readings of 75° or upwards were frequently reported at the Scandinavian stations, and on Friday, the 18th, the thermometer rose to 81° at Haparanda and to 86° at Hernösand—both places on the Gulf of Bothnia. The last-mentioned reading was no less than 34° higher than the maximum recorded in London on the same day (only 52°). In Dublin the weather was comparatively fine and warmer than in England—the thermometer reaching 66·0° on the 18th and 71·6° on the 19th. On the evening of the latter day lofty cirri were seen illumined by the sun as late as 9 p.m.

In the course of the week ending Saturday, the 26th, a gradual but decided improvement in the weather was in progress over Western Europe. As the week advanced a high-pressure system moved slowly southwards from the N.W. coasts of the United Kingdom, temperature rose generally, and the weather became dry and at intervals very bright. Sunday, the 20th, was warm and fair in Ireland—the thermometer rising to 69·7° in Dublin, even with a N. wind; but in England it was dull and cold. On the 22nd an extensive depression again appeared in the N.W. and N., and at 11 p.m. intensely luminous cirri were seen in the northern sky. These clouds were, no doubt, refracting the sunshine to the northward. A similar phenomenon, in a less marked degree, appeared on the night of the 29th. Pressure remained low in the North until the 26th, but the isobars were not markedly cyclonic, and so very little rain fell, although the winds were high.

On the 27th the barometer rose generally and pressure became uniform, so that magnificent summer-like weather set in and continued to the close of the month. In Dublin light easterly sea-breezes tempered the heat of the sun, but on each of the last three days the thermometer rose to nearly 72° in the screen. Inland the readings were several degrees higher.

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EXTRA REMARKS.

Meteorology.

Abstract of Observations made in the City of Dublin, Lat. 53° 20′ N. Long. 6° 15′ W., for the Month of July, 1886.

Mean Height of Barometer,	29·873 inches.
Maximal Height of Barometer (on 3rd, at 9 a.m.)	30·346 ,,
Minimal Height of Barometer (on 13th, at 11 p.m.)	29·355 ,,
Mean Dry-bulb Temperature,	60·6°.
Mean Wet-bulb Temperature,	56·3°.
Mean Dew-point Temperature,	52·5°.
Mean Elastic Force (Tension) of Aqueous Vapour,	·397 inch.
Mean Humidity,	75·4 per cent.
Highest Temperature in Shade (on 3rd),	78·7°.
Lowest Temperature in Shade (on 9th),	48·6°.
Lowest Temperature on Grass (Radiation) (on 9th),	42·0°.
Mean Amount of Cloud,	65·5 per cent.
Rainfall (on 18 days),	1·722 inches.
Greatest Daily Rainfall (on 17th),	·340 inch.
General Directions of Wind,	N.W. & S.W.

Remarks.

Although it opened with brilliant, hot, summer-like weather, this month proved changeable, showery, and squally, with preponderating northwesterly to southwesterly winds. The contrast, as regards temperature, between the beginning and close, was very striking—the mean temperature of the first seven days being 66·1°, while that of the last week was only 56·2°—a falling off of nearly 10°. In Dublin the rainfall, although distributed over as many as eighteen days, was by no means heavy; and there was a complete absence of thunderstorms. There were high winds on ten days.

In Dublin the mean temperature (61·0°) was very nearly the average (60·7°); the mean dry bulb readings at 9 a.m. and 9 p.m. were 60·6°. In the twenty-one years ending with 1885, July was coldest in 1879 (M. T. = 57·2°) and warmest in 1868 (M. T. = 63·5°). In 1885, the M. T. was 60·8; in the year 1883 it was 57·9°.

The mean height of the barometer was 29·873 inches, or ·083 inch below the average value for July—namely, 29·922 inches. The mercury rose to 30·346 inches at 9 a.m. of the 3rd, and fell to 29·355 inches at 11 p.m. of the 13th. The observed range of atmospherical pressure was, therefore, 0·991 inches—that is, very slightly less than an inch. The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 60·6°, or 3·8° above the value for June, 1886; that calculated by Kaemtz's formula—viz., *min.* + (*max.* — *min.* × ·41) = *Mean Temp.*—from the means of the daily maxima and minima was 59·9°, or 0·3° above the average mean temperature for July, calculated in the same way, in the twenty years, 1865–84, inclusive (59·6°). The arithmetical mean of the maximal and minimal readings was 61·0°, compared with a twenty years' average of 60·7°. On the 3rd the thermometer in the screen rose to 78·7°—wind E.; on the 9th the temperature fell to 48·6°—wind N.N.W. The minimum on the grass was 42·0° on the same date. The rainfall was 1·722 inches, distributed over 18 days. The average rainfall for July in the twenty years, 1865–84, inclusive, was 2·499 inches, and the average number of rainy days was 17·6. The rainfall, therefore, was considerably below the average, while the rainy days were equal to it. In 1880 the rainfall in July was very large—6·087 inches on 24 days—and in 1871, 4·391 inches fell on as many as 28 days. On the other hand, in 1870, only ·539 inch was measured on 8 days, and in 1868 only ·741 inch fell on but 5 days.

At the beginning of the month the distribution of atmospherical pressure over the British Isles and their neighbourhood was continuously anticyclonic, and the weather was bright with a high temperature. Even in Dublin the maximal shade readings on the first five days were 75·6°, 77·5°, 78·7°, 75·6°, and 75·7°, respectively; while in London the corresponding values were 73°, 79°, 83°, 86°, and 81°, the thermometer rising to 85° on the 6th and to 83° on the 7th, at a time when the weather had already become much cooler in Ireland. On Sunday, the 4th, the thermometer rose to 116° in the shade at Biskra in Algeria.

The hot dry weather which prevailed so generally until the 6th gave way gradually during the second week, the change beginning in the N. and W. It was caused by the transference of the high pressure area to a more southern position over France and Spain, and to the appearance in the north of cyclonic systems, which brought with them cloudy, showery conditions.

The weather of the week ending Saturday, July 17th, was very unsettled, with rain in all parts of the kingdom and a somewhat low temperature. The distribution of pressure was mainly cyclonic and the type westerly, the highest barometrical readings being found over France, the Bay of Biscay, or Spain. The centre of an important disturbance, in which the barometer was down to 29·10 inches, passed in an easterly direction across Scotland on the night of the 13th. As it came on, fresh S.W. gales were felt in many parts of Ireland and Scotland, and in its rear strong N.W. winds prevailed. Before it approached, a magnificent display of luminous cirri occurred on the evening of the 12th. The passage of this cyclonic system was accompanied with heavy rains—in Dublin, however, only ·170 inch fell in the two days.

In the course of the week ending the 24th, the weather was again changeable and showery, with prevailing S. and S.W. winds and varying temperature. A number of depressions and subsidiary disturbances passed north-eastwards across the United Kingdom. The most serious of these systems had its centre off the coasts of Sligo and Donegal on the morning of the 22nd, when the barometer was down to 29·11 inches at Mullaghmore, and gales or strong winds from southerly (S.E. to S.W. and W.) points were blowing in Ireland. Next day, diverse air currents in Dublin indicated that a subsidiary depression was passing eastward south of the city. This brought rainy weather to the south of England, the north of France, and Holland, early on the 24th.

During the last week (ending Saturday, the 31st), broken, showery, cold or chilly weather prevailed. On Sunday, the 25th, very electrical cirro-stratus passed over Dublin in an upper current from S. or S.W., while the lower clouds (cumuli) and the wind came from N.E. A thunderstorm seemed imminent, but did not occur. In England, however, towards evening, severe thunderstorms and torrents of rain were reported—·92 inch being registered in London, 1·4 inches at Cambridge, 1·81 at Oxford, and 2·20 at York. As this thunderstorm depression travelled away, fresh cold northerly winds spread over the kingdom. But other disturbances soon arrived from the Atlantic. At noon of the 29th a distinct solar halo was observed from Dublin, and later in the day drenching showers of rain fell locally. On the 31st several low-pressure areas amalgamated, forming a large depression, which travelled away towards Norway, leaving in its wake cold but fine weather.

A solar halo was seen on the 29th; & the atmosphere was foggy on the 2nd.

EXTRA REMARKS.

METEOROLOGY.

Abstract of Observations made in the City of Dublin, Lat. 53° 20′ N., Long. 6° 15′ W., for the Month of August, 1886.

Mean Height of Barometer,	29·964 inches.
Maximal Height of Barometer (on 19th, at 9 p.m.),	30·293 ,,
Minimal Height of Barometer (on 13th, at 9 a.m.),	29·344 ,,
Mean Dry-bulb Temperature,	59·7°.
Mean Wet-bulb Temperature,	56·7°.
Mean Dew-point Temperature,	54·1°.
Mean Elastic Force (Tension) of Aqueous Vapour,	·422 inch.
Mean Humidity,	82·4 per cent.
Highest Temperature in Shade (on 30th),	75·6°.
Lowest Temperature in Shade (on 11th),	47·0°.
Lowest Temperature on Grass (Radiation) (on 11th and 12th),	42·0°.
Mean Amount of Cloud,	61·9 per cent.
Rainfall (on 13 days),	1·503 inches.
Greatest Daily Rainfall (on 21st),	·366 inch.
General Directions of Wind,	W., S.W.

Remarks.

August, 1886, although changeable and at times cool and dull, was for the most part favourable. The leading characteristics of the month were—prevalent westerly and south-westerly winds, often blowing freshly as areas of low atmospherical pressure skirted the extreme western shores of Europe in a north-easterly direction, while the barometer remained high and steady over the Continent; clouded skies, particularly in Ireland, and rather low temperature until towards the close, when the weather became very hot in France and England and warm in Ireland and Scotland. In Dublin the rainfall and rainy days were both below the average, and there was again a complete absence of thunderstorms, although sheet lightning was seen on one occasion—namely, the evening of the 26th.

In Dublin the mean temperature (60·4°) was half a degree above the average (59·9°); the mean dry bulb readings at 9 a.m. and 9 p.m. were 59·7°. In the twenty-one years ending with 1885, August was coldest in 1881 (M. T. = 57·0°) and warmest in 1871 (M. T. = 62·0°). In 1885, the M. T. was only 57·1°; in the year 1879 (the cold year) it was 57·7°.

The mean height of the barometer was 29·964 inches, or 0·060 inch below the average value for August—namely, 29·904 inches. The mercury rose to 30·293 inches at 9 p.m. of the 19th, and fell to 29·344 inches at 9 a.m. of the 13th. The observed range of atmospherical pressure was, therefore, 0·949 inches—that is, slightly less than an inch. The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 59·7°, or 0·9° below the value for July, 1886; that calculated by Kaemtz's formula—viz., *min.* + (*max.* − *min.* × ·41) = *Mean Temp.*—from the means of the daily maxima and minima was 59·3°, or 0·4° above the average mean temperature for August, calculated in the same way, in the twenty years, 1865–84, inclusive (58·9°). The arithmetical mean of the maximal and minimal readings was 60·4°, compared with a twenty years' average of 59·9°. On the 30th the thermometer in the screen rose to 75·6°—wind S.W.; on the 11th the temperature fell to 47·0°—wind W.N.W. The minimum on the grass was 42·0° on the same date. The rainfall was 1·503 inches, distributed over 13 days. The average rainfall for August in the twenty years, 1865–84, inclusive, was 2·877 inches, and the average number of rainy days was 15·5. The rainfall and the rainy days, therefore, were both considerably below the average. In 1874 the rainfall in August was very large—4·946 inches on 18 days—and in 1868, 4·745 inches fell on only 13 days. On the other hand, in 1884, only ·777 inch was measured on 8 days.

A solar halo was seen on the 3rd. The atmosphere was foggy on the 20th and 23rd. High winds were noted on as many as 11 days. Sheet lightning was seen on the evening of the 26th.

The weather during the first week was changeable, with a good deal of cloud and some showers—from which Dublin was almost entirely exempt—variable winds, at first low and finally high temperatures.

In the second week, conditions were very unsettled, the weather squally and showery, and temperature for the most part low for the time of year. Barometrical pressure was usually highest to the S. of the United Kingdom, and in the course of the period two depressions of considerable interest appeared in our area. The first of these—a system of gradually increasing intensity—appeared in the Bay of Biscay on the 9th, then travelled northeastwards to the north of Denmark, causing heavy rain in England. The second depression—one of diminishing intensity—came in over Ireland on the 12th; by the next morning the centre had reached Kerry and Cork, where the barometer was below 29·30 inches. It caused gales and rains in Ireland and severe thunderstorms in parts of England.

In the week ending Saturday, the 21st, the weather was again far from settled. The week commenced with S.W. winds and squally showery weather—the wind blowing a gale in the extreme W. and N. of the kingdom. On Tuesday, the 17th, the barometer rose considerably in the west, and cool N.W. winds set in, with local showers and at Cambridge a heavy thunderstorm. Pressure remained high throughout the week, but there were local irregularities, which produced unsettled weather. One of these shallow depressions formed over the Irish Sea on Saturday, the 21st, and caused a gloomy, wet day in the east of Ireland.

The weather of the fourth week (ending Saturday, 28th) was fine and dry over the greater part of England, but somewhat variable and cloudy in Ireland and Scotland. Atmospherical pressure was at first high, but a series of depressions soon began to pass in a north-easterly direction along our extreme western and northern coasts, notably on the 28th, when a S. gale occurred in the west of Ireland. With the advent of the southerly and south-westerly winds accompanying these Atlantic depressions, temperature rose decidedly and was generally rather above the average for the season. Over England the maxima frequently exceeded 75°, reaching 77° or 78° in the S.E. on the 22nd and 24th. In Dublin the highest reading for the week was 73·6° on the 26th.

During the last three days conditions were anticyclonic and quiet on the Continent and in England, where the heat became intense, but less settled in Ireland, as depressions continued to skirt our western seaboard. The maxima in London for these days were 80°, 87°, and 87° respectively; those in Dublin were 72·0°, 75·6°, and 71·6°.

The rainfall at Greystones, county Wicklow, during August was 1·400 inches on only ten days.

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EXTRA REMARKS.

METEOROLOGY.

Abstract of Observations made in the City of Dublin, Lat. 53° 20′ N. Long. 6° 15′ W., for the Month of September, 1886.

Mean Height of Barometer,	29·978 inches.
Maximal Height of Barometer (on 15th, at 9 p.m.),	30·506 ,,
Minimal Height of Barometer (on 9th, at 12 30 p.m.),	29·448 ,,
Mean Dry-bulb Temperature,	55·6°.
Mean Wet-bulb Temperature,	53·0°.
Mean Dew-point Temperature,	50·6°.
Mean Elastic Force (Tension) of Aqueous Vapour,	·372 inch.
Mean Humidity,	84·0 per cent.
Highest Temperature in Shade (on 13th),	69·5°.
Lowest Temperature in Shade (on 23rd),	39·0°.
Lowest Temperature on Grass (Radiation) (on 23rd),	32·5°.
Mean Amount of Cloud,	55·9 per cent.
Rainfall (on 15 days),	2·471 inches.
Greatest Daily Rainfall (on 9th),	·649 inch.
General Directions of Wind,	S.W., W.S.W., N.E.

Remarks.

Two distinct types of weather presented themselves during this month—cyclonic, rainy, and even stormy, from the 4th to the 13th, and again after the 24th; but anticyclonic, quiet, and dry, with easterly winds from the 14th to the 24th, inclusive. Temperature ranged about the average; rainfall was somewhat in excess, but it was distributed over only the usual number of days for September—namely, 15.

In Dublin the mean temperature (56·2°) was one-fifth of a degree above the average (56·0°); the mean dry bulb readings at 9 a.m. and 9 p.m. were 55·6°. In *the twenty-one years* ending with 1885, September was coldest in 1866 and 1882 (M. T. = 53·0°) and warmest in 1865 (M. T. = 61·4°). In 1885, the M. T. was only 54·4°; in the year 1879 (the cold year) it was 54·3°.

The mean height of the barometer was 29·978 inches, or 0·061 inch above the average value for September—namely, 29·917 inches. The mercury rose to 30·506 inches at 9 p.m. of the 15th, and fell to 29·448 inches at 12 30 p.m. of the 9th. The observed range of atmospherical pressure was, therefore, 1·058 inches—that is, slightly more than an inch. The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 55·6°, or 4·1° below the value for August, 1886; that calculated by Kaemtz's formula—viz., *min.* + (*max.* — *min.* × ·41) = *Mean Temp.*—from the means of the daily maxima and minima was 55·1°, or precisely equal to the average mean temperature for September, calculated in the same way, in the twenty years, 1865–84, inclusive (55·1°). The arithmetical mean of the maximal and minimal readings was 56·2°, compared with a twenty years' average of 56·0°. On the 13th the thermometer in the screen rose to 69·5°—wind S.W.; on the 23rd the temperature fell to 39·0°—wind N.N.W. The minimum on the grass was 32·5° on the same date. The rainfall was 2·471 inches, distributed over 15 days. The average rainfall for September in the twenty years, 1865–84, inclusive, was 2·289 inches, and the average number of rainy days was 14·5. The rainfall and the rainy days, therefore, were both perceptibly above the average. In 1871 the rainfall in September was very large—4·048 inches on however only 13 days—and in 1869, 3·957 inches fell on 21 days. On the other hand, in 1865, only ·056 inch was measured on only 3 days. This last was the driest month recorded in Dublin during at least the last quarter of a century.

A lunar rainbow was seen on the 11th. The atmosphere was foggy on the 2nd, 3rd, 4th, 20th and 28th. High winds were noted on as many as 12 days. Sheet lightning was seen on the evenings of the 26th and 27th. Thunder and lightning occurred on the 4th in the neighbourhood of Dublin, and distant thunder was heard on the 5th also.

The month opened with fine weather, high barometer readings, and warmth. Some of the maximal temperatures over England were as high as 87°, and on the Continent even this heat was exceeded on several occasions. On Saturday, the 4th, an irregular depression travelled northwards across the S.W. of England, Wales, and Ireland, causing severe thunderstorms and heavy rain.

During the week ending Saturday, the 11th, the weather was unsettled. At the beginning local thunderstorms were reported. After the 6th atmospherical pressure was low off the N.W. of Ireland, high over France and Germany. During this period three well-marked depressions passed by our extreme N.W. and W. coasts. These caused S. and S.W. gales, or high winds, and heavy downpours of rain in most parts of Ireland and Scotland, while conditions were less unsettled in England.

Early in the third week (that ending Saturday, the 18th), an important change took place in the distribution of pressure, and consequently in the weather also. After a well-marked but shallow depression had travelled quickly north-eastwards across Ireland and Scotland on the 13th, a large anticyclone came in from the Atlantic, producing N. and E. winds, dry and cool weather. On the night of the 15th–16th temperature fell to 33° at Leith, and next night frost was reported from the N. and E. of Scotland. The barometer rose above 30·6 inches near the centre of the anticyclone. In Dublin the highest reading was 30·51 inches on the night of the 15th.

From the 19th to the 24th the meteorological conditions were anticyclonic in the N., cyclonic in the S. On Monday, the 20th, a system of low pressure formed over the Bay of Biscay, and the easterly wind freshened considerably. This depression lay for two days over Brittany and then dispersed. On the 25th, temperature rose, and conditions became mild, unsettled and showery, as depressions began to appear off the west coast of Ireland.

Sunday, the 26th, was very fine in Ireland, rainy in England; but at night a deep and extensive depression came in from the Atlantic, bringing with it gales, rain, and lightning. From this time to the close of the month, squally, showery weather continued in Ireland.

At Greystones, county Wicklow, the rainfall for the month was 2·614 inches distributed over seventeen days.

EXTRA REMARKS.

METEOROLOGY.

Abstract of Observations made in the City of Dublin, Lat. 53° 20′ N., Long. 6° 15′ W., for the Month of October, 1886.

Mean Height of Barometer,	29·760 inches.
Maximal Height of Barometer (on 24th, at 9 p.m.),	30·378 ,,
Minimal Height of Barometer (on 15th, at 1 p.m.),	28·530 ,,
Mean Dry-bulb Temperature,	51·4°.
Mean Wet-bulb Temperature,	49·7°.
Mean Dew-point Temperature,	47·9°.
Mean Elastic Force (Tension) of Aqueous Vapour,	·337 inch.
Mean Humidity,	88·4 per cent.
Highest Temperature in Shade (on 5th),	64·6°.
Lowest Temperature in Shade (on 22nd),	36·2°.
Lowest Temperature on Grass (Radiation) (on 22nd),	29·0°.
Mean Amount of Cloud,	59·7 per cent.
Rainfall (on 24 days),	6·163 inches.
Greatest Daily Rainfall (on 15th),	1·560 ,,
General Directions of Wind,	S.W., E., N.E.

Remarks.

A genial month as regards temperature, but rain fell heavily and well-nigh incessantly during the first three weeks—5·582 inches being measured on 18 out of the first 19 days. It is to be observed that October is, on the average, the month of the greatest precipitation in Dublin—3·025 inches. On the 23rd the barometer rose decidedly, and drying winds from E.N.E., of considerable strength, set in, and continued to blow for several days. Some bright sunshine was enjoyed at the close of the month, the 31st being an exceptionally fine, clear day.

In Dublin the mean temperature (52·0°) was 2° above the average (50·0°); the mean dry bulb readings at 9 a.m. and 9 p.m. were 51·4°. In the twenty-one years ending with 1885, October was coldest in 1880 (M. T. = 45·4°) and warmest in 1876 (M. T. = 53·1°). In 1885, the M. T. was only 45·5°; in the year 1879 (the cold year) *it* was 49·7°.

The mean height of the barometer was 29·760 inches, or 0·087 inch below the average value for October—namely, 29·847 inches. The mercury rose to 30·378 inches at 9 a.m. of the 24th, and fell to 28·530 inches at 1 p.m. of the 15th. The observed range of atmospherical pressure was, therefore, 1·848 inches—that is, more than an inch and three-quarters. The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 51·4°, or 4·2° below the value for September, 1886; that calculated by Kaemtz's formula—viz., *min.* + (*max.* — *min.* × ·41) = *Mean Temp.*—from the means of the daily maxima and minima was 51·2°, or precisely 2° above the average mean temperature for October, calculated in the same way, in the twenty years, 1865–84, inclusive (49·2°). The arithmetical mean of the maximal and minimal readings was 52·0°, compared with a twenty years' average of 50·0°. On the 5th the thermometer in the screen rose to 64·6°—wind S.S.E; on the 22nd the temperature fell to 36·2°—wind calm. The minimum on the grass was 29·0° on the same date. The rainfall was 6·163 inches, distributed over as many as 24 days. The average rainfall for October in the twenty years, 1865–84, inclusive, was 3·025 inches, and the average number of rainy days was 17·2. The rainfall and the rainy days, therefore, were both largely above the average—the rainfall more than one hundred per cent. In 1880 the rainfall in October was very large—7·358 inches on, however, only 15 days; 2·736 inches being measured on the 27th alone in that year—and in 1875, 7·049 inches fell on 26 days. On the other hand, in 1884, only ·834 inch was measured on but 14 days. In 1868 also—the "warm year"—the October rainfall was only ·856 inch on 15 days.

A lunar halo was seen on the 6th. The atmosphere was foggy on on the 6th and 8th. High winds were noted on as many as 13 days, gales prevailing on four days. Hail fell on the 10th.

At the beginning of the month southerly winds prevailed, and the weather was fine in the east of Ireland and in England. On the 1st the thermometer in the shade rose to 80° at Cambridge, 78° in London, 73° at Oxford, and 72° at Loughborough, but only to 59·7° in Dublin. On the evening of the 2nd a depression off the west of Ireland brought to that country a southerly gale and heavy rains.

The weather of the week ending Saturday, the 9th, was for the most part cloudy, unsettled, and rainy in Ireland and Scotland; but in England the earlier part of the period was fine and unusually warm for the time of year. On Monday, the 4th, the thermometer exceeded 75° in many parts of England, the highest reading of all being 80° in London and at Cambridge. On Saturday a deep depression appeared in the west, moving northwards and occasioning fresh S.E. or S. gales and rain in most places.

During the week ending the 16th, very unsettled conditions were prevalent. Strong winds or gales and heavy rains were experienced in nearly all parts of the United Kingdom, and on the 15th and 16th a storm of exceptional violence caused much damage to life and property. Atmospherical pressure was continuously highest in Spain, while several depressions appeared over the British Islands—the most important being that of the 15th and 16th. This system advanced over Ireland on the night of the 14th, the readings of the barometer in its centre ultimately falling as low as 28·5 inches. In the course of Friday morning (the 15th) the disturbance travelled eastwards to the Irish Sea, with its centre a short distance north of Dublin, where the wind was light and fitful, blowing first from S.E. and then from W.S.W. After remaining almost stationary for some hours, the cyclone (for such it was) travelled in a S.E. direction to the south of England and afterwards to the north-east of France, finally dispersing over Holland on the 17th. The depression produced fresh E. gales in the north and fresh S.E. or S. gales in the east of our islands; but over the English Channel, the Bay of Biscay, and the S.W. of England the wind blew a most severe gale, first from S.W. and afterwards from N.W. or N. During the progress of the disturbance heavy rain was experienced in nearly all parts of the United Kingdom. In Dublin the rainfall on the 14th and 15th was 2·090 inches, or one-third of the precipitation for the whole month and more than two-thirds of the average rainfall for October.

The weather of the period from the 17th to the 23rd was much quieter than that of the preceding week, but conditions were by no means settled and several shallow depressions appeared, chiefly in the S. Temperature did not differ greatly from the normal, but towards the close night frosts were reported from the inland parts of Great Britain and Ireland—in Dublin the minimum was 36·2° on the 22nd.

In the last week (24th–31st) atmospherical pressure was highest (30·5 inches, or upwards) over Scandinavia and the Baltic, and, as a rule, lowest over the Bay of Biscay and off the S. and S.W. of Ireland. Easterly winds prevailed, of greatest strength on the 25th. In Dublin the weather was at first dry and bracing, afterwards changeable, with sunny spells by day and rain or showers by night. The 31st was a brilliant, summerlike day.

H2H 87

EXTRA REMARKS.

Meteorology.

Abstract of Observations made in the City of Dublin, Lat. 53° 20′ N. Long. 6° 15′ W., for the Month of November, 1886.

Mean Height of Barometer,	29·887 inches.
Maximal Height of Barometer (on 24th, at 9 p.m.),	30·776 ,,
Minimal Height of Barometer (on 5th, at 11 p.m.),	29·124 ,,
Mean Dry-bulb Temperature,	45·9°.
Mean Wet-bulb Temperature,	44·3°.
Mean Dew-point Temperature,	42·5°.
Mean Elastic Force (Tension) of Aqueous Vapour,	·274 inch.
Mean Humidity,	88·2 per cent.
Highest Temperature in Shade (on 3rd),	58·5°.
Lowest Temperature in Shade (on 7th),	34·1°.
Lowest Temperature on Grass (Radiation) (on 7th),	27·9°.
Mean Amount of Cloud,	65·3 per cent.
Rainfall (on 18 days),	2·180 inches.
Greatest Daily Rainfall (on 5th),	·452 inch.
General Directions of Wind,	S.W., W., N.W.

Remarks.

A mild, open month, but generally dull and damp. Rain fell frequently, but the amounts were on no occasion very large. During the prevalence of a remarkable anticyclone in the fourth week temperature was singularly high in Dublin for the time of year, whereas in London dense fogs and sharp frosts were repored daily.

In Dublin the mean temperature (46·4°) was—as in October—2° above the average (44·4°); the mean dry bulb readings at 9 a.m. and 9 p.m. were 45·9°. In the twenty-one years ending with 1885, November was coldest in 1878 (M. T. = 38·2°) and warmest in 1881 (M. T. = 50·3°). In 1885, the M. T. was 45·9°, or only 0·4° below that of the preceding October; in the year 1879 (the cold year) it was 43·9°.

The mean height of the barometer was 29·887 inches, or 0·020 inch above the average value for November—namely, 29·867 inches. The mercury rose to 30·776 inches at 9 p.m. of the 24th, and fell to 29·124 inches at 11 p.m. of the 5th. The observed range of atmospherical pressure was, therefore, 1·652 inches—that is, more than an inch and one-half. Atmospherical pressure had not been as high in Dublin as it was on the 24th since 9 a.m. of March 5, 1883, when the reading was 30·791 inches. On January 18, 1882, the remarkably high value of 30·935 inches was recorded at 10 30 p.m. The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 45·9°, or 5·5° below the value for October, 1886; that calculated by Kaemtz's formula—viz., *min.* + (*max.* — *min.* × ·41) = *Mean Temp.*—from the means of the daily maxima and minima was 45·7°, or precisely 2° above the average mean temperature for November, calculated in the same way, in the twenty years, 1865–84, inclusive (43·7°). The arithmetical mean of the maximal and minimal readings was 46·4°, compared with a twenty years' average of 44·4°. On the 3rd the thermometer in the screen rose to 58·5°—wind S.S.W.; on the 7th the temperature fell to 34·1°—wind N.W. The minimum on the grass was 27·9° on the same date. The rainfall was 2·180 inches, distributed over as many as 18 days. The average rainfall for November in the twenty years, 1865–84, inclusive, was 2·312 inches, and the average number of rainy days was 16·8. The rainfall and the rainy days, therefore, were both somewhat below the average. In 1876 the rainfall in November was large—3·614 inches on 20 days; and in 1872 3·414 inches fell on as many as 24 days. On the other hand, in 1870, only 1·218 inches were measured on 11 days. In 1868 also—the "warm year"—and in 1871 the November rainfall was only 1·258 inches on 19 and 14 days, respectively. The amount of precipitation varies almost less in this than in any other month.

A solar halo was seen on the 1st and a lunar halo on the 2nd. The atmosphere was foggy on the 17th, 18th, 22nd, 23rd, 25th, 26th, and 27th. High winds were noted on 8 days, gales prevailing on 2 days. Hail fell on the 10th and 11th, and snow and sleet on the morning of the 9th. A thunderstorm, with heavy rain and hail, passed a few miles S.E. of Dublin early in the morning of the 10th. At 7 45 p.m. of the 2nd a brilliant meteor flashed across the southern portion of the heavens from N.E. to S.W.

In the week ending Saturday, the 6th, changeable weather prevailed, depending on a south-westerly type of pressure distribution, a large area of high barometrical readings being found over central and southern Europe, while a series of depressions skirted the W. and N.W. coasts of the British Isles. On the 5th, however, a deep depression formed over England, causing northerly winds and low temperature in Ireland. At 8 a.m. of the 6th the barometer was below 28·90 inches in Yorkshire and the midland counties of England.

During the second week (7th–13th inclusive) very changeable, wet weather was experienced in Great Britain, while it was colder, with northerly winds, in Ireland. Numerous, although not deep, depressions moved along very erratic paths over the former country—some of the systems travelling from N. to S., while others pursued an opposite course, moving from S. to N. as tangents to a high pressure system, which held over Scandinavia. On the morning of the 9th, local cold and sharp frost held in central Ireland, and sleet and snow fell heavily in and about Dublin, the mountains being covered with snow for the first time this season. Early next morning a thunderstorm, accompanied with heavy rain and hail, came in upon the coast at Bray and Greystones, Co. Wicklow, from N.E. Hail fell in Dublin later in the day, as also on the 11th.

The weather of the third week (14th–21st inclusive) was much quieter and finer, although small amounts of rain still fell from time to time. At first the barometer was low generally, and on Wednesday, the 17th, a rather deep subsidiary depression passed eastwards across Wales and England, causing rains and high winds in those countries, whereas a bright bracing day was experienced in Dublin. On the 18th, however, the barometer rose briskly, and an anticyclone began to form over France. This system gradually became intensified, spreading northwards over the United Kingdom, where it finally remained stationary for several days.

During the fourth week, from the 21st to the 27th, the distribution of pressure, temperature, winds, and weather, were all continuously anticyclonic. In Ireland the winds were at first S.W., and dull, mild weather prevailed, but in the S.E. of England dense fogs and low temperature accompanied the high pressure system—early on the 24th minima were recorded as low as 27° at Cambridge, 28° at Oxford and in London. On the evening of this day the barometer read 30·79 inches at Birr Castle, Parsonstown, and 30·78 inches in Dublin. The London fogs during this calm period were of exceptional density, but of strange inconstancy as regards their distribution in that metropolis.

The last few days witnessed the gradual retreat of the anticyclone—which was also slowly dispersing—to the Continent, and the re-establishment of steep gradients for S.W. and W. winds in the British Islands and Scandinavia. At the close of the month temperature was falling decidedly and snow showers had set in over Scotland.

33.7.89

METEOROLOGY.

Abstract of Observations made in the City of Dublin, Lat. 53° 20′ N. Long. 6° 15′ W., for the Month of December, 1886.

Mean Height of Barometer,	29·682 inches.
Maximal Height of Barometer (at 9 a.m. of 31st),	30·501 ,,
Minimal Height of Barometer (at 2 30 p.m. of 8th),	27·758 ,,
Mean Dry-bulb Temperature,	37·2°.
Mean Wet-bulb Temperature,	35·8°.
Mean Dew-point Temperature,	33·7°.
Mean Elastic Force (Tension) of Aqueous Vapour,	·197 inch.
Mean Humidity,	87·6 per cent.
Highest Temperature in Shade (on 6th),	53·2°.
Lowest Temperature in Shade (on 21st),	22·0°.
Lowest Temperature on Grass (Radiation) (on 21st),	16·8°.
Mean Amount of Cloud,	53·3 per cent.
Rainfall (on 21 days),	3·348 inches.
Greatest Daily Rainfall (on 14th),	·734 inch.
General Directions of Wind,	W., W.N.W.

Remarks.

This was a cold month, the weather being especially unsettled and changeable. The most remarkable feature in the meteorology of the month was the phenomenal atmospherical depression which passed across the North of Ireland, and afterwards the North of England, on Wednesday, the 8th. Near the centre of this system the barometer fell below 27·50 inches—a reduction of pressure almost as great as that which occurred on the 26th of January, 1884, when the reading 27·334 inches was recorded at Ochtertyre, near Crieff, in Perthshire. The coldness of the month may be estimated from the fact that the thermometer fell to or below 32° in the screen on twelve nights, and on the grass on no fewer than twenty-nine nights.

In Dublin the mean temperature (37·9°) was 3·4° below the average (41·3°); the mean dry bulb readings at 9 a.m. and 9 p.m. were 37·2°. In the twenty-one years ending with 1885, December was coldest in 1878 (M. T. = 32·8°) and warmest in 1865 (M. T. = 46·2°). In 1874, the M. T. was 36·8°, and in 1870 it was 37·3°. In 1885, the M. T. was 42·0°; in the year 1879 (the cold year) it was 37·9°, or exactly the same as in the present year.

The mean height of the barometer was 29·682 inches, or 0·200 inch below the average value for December—namely, 29·882 inches. The mercury rose to 30·501 inches at 9 a.m. of the 31st, and fell to 27·758 inches at 2 30 p.m. of the 8th. The observed range of atmospherical pressure was, therefore, as much as 2·743 inches—that is, nearly two inches and three-quarters. Atmospherical pressure had not been as low in Dublin as it was on the 8th for more than fifty years, at all events. The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 37·2°, or 8·7° below the value for November, 1886; that calculated by Kaemtz's formula—viz., *min.* + (*max.* — *min.* × ·41) = *Mean Temp.*—from the means of the daily maxima and minima was 37·0°, or precisely 3·5° below the average mean temperature for December, calculated in the same way, in the twenty years, 1865–84, inclusive (40·5°). The arithmetical mean of the maximal and minimal readings was 37·9°, compared with a twenty years' average of 41·3°. On the 6th the thermometer in the screen rose to 53·2°—wind W. by S.; on the 21st the temperature fell to 22·0°—wind W.N.W. The minimum on the grass was 16·8° on the same date. The rainfall was 3·348 inches, distributed over as many as 21 days. The average rainfall for December in the twenty years, 1865–84, inclusive, was 2·516 inches, and the average number of rainy days was 17·0. The rainfall and the rainy days, therefore, were both considerably above the average. In 1876 the rainfall in December was very large—7·566 inches on 22 days; in 1872 4·932 inches fell on as many as 24 days; and in 1868 (which was otherwise a fine and dry year), 4·749 inches fell on as many as 27 days. On the other hand, in 1867, only ·771 of an inch was measured on 13 days; and in 1871, the December rainfall was only ·797 of an inch on 15 days. But in 1885, only ·742 of an inch of rain was measured on but 10 days.

Solar halos were seen on the 2nd, 13th, and 25th, and lunar halos on the 2nd, 7th, and 10th. The atmosphere was foggy on the 3rd, 14th, 15th, 16th, 20th, 21st, 29th, 30th, and 31st. High winds were noted on 16 days, gales prevailing on 4 days. Hail fell on the 8th, 16th, and 20th, and snow or sleet on the 1st, 8th, 14th, 16th, 18th, 19th, and 28th.

At the beginning of the month, N.W. winds and cold weather prevailed in the rear of an atmospherical depression which lay over the south of Scandinavia. On the night of Friday, the 3rd, a V-shaped depression passed eastwards across Ireland, causing rain and sudden changes of temperature. Then came two days of high temperature, and strong westerly winds, and dull damp weather. Tuesday, the 7th, was much colder and clearer, but, towards night, the barometer fell fast and the wind backed to S. and S.S.E., as one of the deepest depressions of modern times approached Ireland from the Atlantic.

On Wednesday, December 8, the centre of one of the deepest and most extensive atmospherical depressions observed during the present century, passed across the north of Ireland in an easterly direction. At 8 a.m. the centre was apparently close to Belmullet, County Mayo, where the barometer then stood at 27·58 inches, or as much as 1·85 inches below the reading recorded at that station only 24 hours previously. From Mayo the system travelled eastwards across Ulster, reaching the south of Scotland and north-west of England at 6 p.m., when the barometer read only 27·41 inches at Barrow-in-Furness.

In Dublin the minimal pressure was recorded at 2 30 p.m., and was 27·758 inches. At the Ordnance Survey Office, Phœnix Park, the minimum was 27·766 inches, being the lowest reading on record at that station since 1829. At Armagh Observatory the minimum was reached at 1 p.m. and was 27·446 inches (27·214 inches at an elevation of 208 feet above mean sea level and approximate air temperature 48·0°).

During the remarkable depression of Saturday, January 26th, 1884, when the barometer receded to 27·332 inches at Ochtertyre, near Crieff, in Perthshire, the lowest pressure in Dublin was 28·150 inches. In the hurricane of January 6 and 7, 1839, the reading was not even so low—viz., 28·290 inches at the Ordnance Survey Office, Phœnix Park. At that station, however, six weeks previously, on November 28, 1838, the barometer had fallen to 27·769 inches at 8 p.m. But even this phenomenal value was ·011 inch in excess of that registered in the City of Dublin on last Wednesday—27·758 inches, a reading no less than 3·018 inches below that recorded a fortnight previously, namely, 30·776 inches at 9 p.m. of Wednesday, November 24, 1886. On February 5, 1870, the reading of 27·330 inches was recorded on the Cunard steamer *Tarifa*, in the Atlantic, in lat. 51° N. and long. 24° W.

The gales attending the depression of December 8 were very fierce from S.W. to N.W. on the English coasts, and so were the easterly gales in the North of Scotland, but in and about Dublin no violent storm occurred during the passage of the cyclone.

The weather of the week ending Saturday, the 18th, was very unsettled. Rain or sleet fell frequently over England, and showers of snow were reported from Scotland nearly every day. On Tuesday and Wednesday, the 14th and 15th, an area of low pressure advanced over the southern portion of Ireland and the greater part of England. It caused strong easterly winds and heavy downpours of cold rain, sleet, and snow. On the morning of the 16th also, snow, sleet, and hail fell heavily, though but locally, in Dublin. After this, a severe frost set in, culminating on the 21st in Ireland and on the 22nd in England. On the former day a depression appeared off the N.W. of Ireland, whence it travelled eastwards to Scotland, producing a thaw and heavy rain, with thunderstorms in some places. Temperature now became very unsteady, the changes as the S.W. current of wind alternated with the N.W. or N. current being sudden and at times considerable. Christmas Day proved fair and bright, with a light frost.

On Sunday, the 26th, a deep depression appeared at the entrance to the English Channel, along which it travelled towards E.N.E. with great rapidity. In Dublin the day was dull and cold, and frost set in towards night, but no precipitation occurred. In England, however, violent gales prevailed, and a downpour of rain was followed by a snowstorm of unexampled severity. At Southampton, in 19 hours, the precipitation amounted to 2·88 inches of rain water, at Plymouth 1·8 inches of rain fell in 6 hours during a N.E. gale, and in London nearly 2 inches of rain were measured. The wet snow clinging to telegraph wires and trees caused great damage. On the 29th an anticyclone came in over Ireland from the westward, and as it advanced dense fogs and sharp frost set in—particularly in England, where temperature fell below 20° ere the year closed.